Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for reducing noise in a digital image, the method comprising:

providing the digital image, the digital image comprising a plurality of channels with each of the channels comprising a set of pixel data signals; ~~and~~

selecting a different filter for each of the sets of pixel data signals based on at least exposure duration and one or more scene statistics for the provided digital image; and

applying ~~a filter to~~ each of the different selected filters to a different one of the sets of pixel data signals~~, wherein each of the filters is adjusted and applied differently and independently to each of the sets of pixel data signals~~.

2. (Currently Amended) The method as set forth in claim 1 wherein each of the different adjusted filters is a median filter and the ~~step of~~ applying each of the different adjusted filters ~~a filter~~ further comprises replacing each individual pixel data signal within the set of pixel data signals with a median pixel data signal derived from a median value of adjacent pixel data signals within a set radius around the individual pixel data signal.

3. (Original) The method as set forth in claim 2 wherein the set radius is different for the different filters.

4. (Original) The method as set forth in claim 2 further comprising adjusting the set radius of pixel data signals in the filter for each of the channels of the digital image based on at least one factor.

5. (Previously Presented) The method as set forth in claim 4 wherein the factor comprises a duration of exposure for capturing the digital image.

6. (Original) The method as set forth in claim 1 wherein the plurality of channels comprises a red channel, a green channel, and a blue channel.

7. (Currently Amended) The method as set forth in claim 1 further comprising applying a color-space transformation to the sets of pixel data signals before the ~~step of~~ applying ~~a filter~~ each of the different adjusted filters.

8. (Original) The method as set forth in claim 1 further comprising:

identifying the pixel data signals in each set of pixel data signals with at least a first characteristic; and

restricting the application of the filters to the unidentified pixel data signals in each set of pixel data signals.

9. (Original) The method as set forth in claim 8 wherein the first characteristic is noise at or above a first threshold level.

10. (Currently Amended) A method for reducing noise in a digital image comprising:

providing the digital image comprising red, green, and blue channels;

transforming the red, green, and blue channels to an achromatic channel and two chrominance channels, wherein the achromatic channel and the two chrominance channels each comprise a set of pixel data signals; ~~and~~

selecting a different filter for each of the transformed sets of pixel data signals based at least on exposure duration and one or more scene statistics for the provided digital image; and

applying ~~a filter to~~ each of the different selected filters to a different one of the transformed sets of pixel data signals ~~, wherein each of the filters is adjusted and applied differently and independently to each of the sets of pixel data signals~~.

11. (Currently Amended) The method as set forth in claim 10 wherein each of the different adjusted filters is a median filter and the ~~step of~~ applying ~~a filter~~ each of the different adjusted filters further comprises replacing each individual pixel data signal within the set of pixel data signals with a median pixel data signal derived from a median value of adjacent pixel data signals within a set radius around the individual pixel data signal.

12. (Original) The method as set forth in claim 11 wherein the set radius is different for the different filters.

13. (Original) The method as set forth in claim 11 further comprising adjusting the set radius of pixel data signals in the filter for each of the channels of the digital image based on at least one factor.

14. (Original) The method as set forth in claim 13 wherein the factor comprises a duration of exposure for capturing the digital image.

15. (Original) The method as set forth in claim 10 further comprising:

identifying the pixel data signals in each set of pixel data signals with at least a first characteristic; and

restricting the application of the filters to the unidentified pixel data signals in each set of pixel data signals.

16. (Original) The method as set forth in claim 15 wherein the first characteristic is noise at or above a first threshold level.

17. (Currently Amended) A method for reducing noise in a digital image, the method comprising:

providing the digital image, the digital image comprising a plurality of channels with each of the channels comprising a set of pixel data signals;

~~identifying the pixel data signals in each set~~ providing a grayscale mask for each of the sets of pixel data signals, each of the grayscale masks has one of a range of threshold values for an exposure condition for each of the pixel data signals that indicates when each of the pixel data signals should be filtered ~~with at least a first characteristic; and~~

selecting a different median filter for each of the sets of pixel data signals based on at least exposure duration and one or more scene statistics for the provided digital image; and

applying ~~a~~ each of the different median filters to a different one ~~filter to the identified pixel data signals in each~~ of the sets of pixel data signals, wherein the application of the filters to one or more of the pixel data signals in each of the sets of pixel data signals is based on the threshold values for each of the pixel data signals provided by the grayscale mask ~~applying the filter is restricted to the identified pixel data signals and wherein each of the filters is adjusted and applied differently and independently to each of the sets of pixel data signals~~.

18. (Canceled).

19. (Currently Amended) The method as set forth in claim 17 wherein the ~~step of~~ applying ~~a filter~~ each of the different median filters further comprises replacing each

individual pixel data signal within the set of pixel data signals with a median pixel data signal derived from a median value of adjacent pixel data signals within a set radius around the individual pixel data signal and wherein the applying further comprises applying a different filter to each of the sets of pixel data signals.

20. (Original) The method as set forth in claim 19 wherein the set radius is different for the different filters.

21. (Original) The method as set forth in claim 19 further comprising adjusting the set radius of pixel data signals in the filter for each of the channels of the digital image based on at least one factor.

22. (Original) The method as set forth in claim 21 wherein the factor comprises a duration of exposure for capturing the digital image.

23. (Original) The method as set forth in claim 17 wherein the plurality of channels comprises a red channel, a green channel, and a blue channel.

24. (Currently Amended) The method as set forth in claim 17 further comprising applying a color-space transformation to the sets of pixel data signals before the ~~step of~~ applying ~~a filter~~ each of the different median filters.

25. (Currently Amended) An imaging system comprising:

an image sensor apparatus ~~for capturing~~ that captures a digital image comprising a plurality of channels with each of the channels comprising a set of pixel data signals; ~~and~~

a filter system comprising at least three different filters, each of the different filters filtering a different one of the sets of pixel data signals for one of the channels~~, wherein each of the filters is adjusted and applied differently and independently to each of the sets of pixel data signals~~; and

a filtering adjustment system that adjusts each of the different filters in the filter system based on at least exposure duration and one or more scene statistics for the provided digital image.

26. (Currently Amended) The system as set forth in claim 25 wherein each of the different adjusted filters is a median filter and the median filters each replace each

individual pixel data signal within the set of pixel data signals with a median pixel data signal derived from a median value of adjacent pixel data signals within a set radius around the individual pixel data signal.

27. (Original) The system as set forth in claim 26 wherein the set radius is different for the different filters.

28. (Original) The system as set forth in claim 26 wherein the set radius of pixel data signals in the filter for each of the channels of the digital image is adjustable.

29. (Currently Amended) An imaging system comprising:

an image sensor apparatus which captures a digital image comprising red, green, and blue channels;

a transformation system coupled to the image sensor apparatus which transforms the red, green, and blue channels to an achromatic channel and two chrominance channels, wherein the achromatic channel and the two chrominance channels each comprise a set of pixel data signals; ~~and~~

a filter system comprising at least two different filters, each of the filters filtering at least one of the transformed sets of pixel data signals for one of the achromatic or chrominance channels~~, wherein the filter applied to at least one of the sets of pixel data signals is different from the filter applied to another one of the sets of pixel data signals, wherein each of the filters is adjusted and applied differently and independently to each of the sets of pixel data signals~~; and

a filtering adjustment system that adjusts each of the filters to a different one of the sets of pixel data signals based on at least exposure duration and one or more scene statistics for the provided digital image.

30. (Currently Amended) The system as set forth in claim 29 wherein each of the filters is a median filter and the median filters each replace each individual pixel data signal within the set of pixel data signals with a median pixel data signal derived from a median value of adjacent pixel data signals within a set radius around the individual pixel data signal.

31. (Original) The system as set forth in claim 30 wherein the set radius is different for the different filters.

32. (Original) The system as set forth in claim 30 wherein the set radius of pixel data signals in the filter for each of the channels of the digital image is adjustable.

33. (Currently Amended) An imaging system comprising:

an image sensor apparatus for capturing a digital image comprising a plurality of channels with each of the channels comprising a set of pixel data signals;

a grayscale masking system with a grayscale mask for each of the sets of pixel data signals, each of the grayscale masks has one of a range of threshold values for an exposure condition for each of the pixel data signals that indicates when each of the pixel data signals should be filtered ~~which identifies the pixel data signals in each set of pixel data signals with at least a first characteristic~~; ~~and~~

a filter system ~~applying~~ that applies a different median filter to ~~the unidentified pixel data signals in~~ each of the sets of pixel data signals, wherein the filtering system applies each of the different median filters to one or more of the pixel data signals in each of the sets of pixel data signals based on the threshold values for each of the pixel data signals provided by the grayscale mask ~~the applying the filter is restricted to the identified pixel data signals, wherein each of the filters is adjusted and applied differently and independently to each of the sets of pixel data signals~~; and

a filtering adjustment system that adjusts each of the different median filters based on at least exposure duration and one or more scene statistics for the provided digital image.

34. (Canceled).

35. (Previously Presented) The system as set forth in claim 33 wherein the filters each replace each individual pixel data signal within the set of pixel data signals with a median pixel data signal derived from a median value of adjacent pixel data signals within a set radius around the individual pixel data signal, wherein a different one of the filters is applied to each of the sets of pixel data signals.

36. (Original) The system as set forth in claim 35 wherein the set radius is different for the different filters.

37. (Original) The system as set forth in claim 35 wherein the set radius of pixel data signals in the filter for each of the channels of the digital image is adjustable.

38. (Previously Presented) The system as set forth in claim 33 further comprising a transformation system coupled to the image sensor apparatus which transforms the red, green, and blue channels to an achromatic channel and two chrominance channels before the filter system applies the filters, wherein the achromatic channel and the two chrominance channels each comprise a set of pixel data signals.

39. (Original) The system as set forth in claim 33 wherein the masking system comprises a memory for storing the identified pixels for the image sensor apparatus.

40. (Currently Amended) The method as set forth in claim 1 further comprising:

~~capturing the digital image with a sensor;~~

~~identifying pixels in a set of pixels for the sensor with a first characteristic;~~

~~storing a map of the identified pixels for the sensor; and~~

providing a grayscale mask for each of the sets of pixel data signals; and

restricting the application of the filters to one or more of the pixel data signals ~~in the unidentified pixels in the set of pixels for the sensor~~ in each of the sets of pixel data signals based on the provided grayscale mask.

41. (Currently Amended) The method as set forth in claim 40 wherein ~~the first characteristic is noise susceptibility above a first threshold~~ each of the grayscale masks has one of a range of threshold values for an exposure condition for each of the pixel data signals that indicates when each of the pixel data signals should be filtered.

42. (Currently Amended) The method as set forth in claim 10 further comprising:

~~capturing the digital image with a sensor;~~

~~identifying pixels in a set of pixels for the sensor with a first characteristic;~~

~~storing a map of the identified pixels for the sensor; and~~

providing a grayscale mask for each of the sets of pixel data signals; and

restricting the application of the filters to one or more of the pixel data signals ~~in the unidentified pixels in the set of pixels for the sensor~~ in each of the sets of pixel data signals based on the provided grayscale mask.

43. (Currently Amended) The method as set forth in claim 42 wherein ~~the first characteristic is noise susceptibility above a first threshold~~ each of the grayscale masks has one of a range of threshold values for an exposure condition for each of the pixel data signals that indicates when each of the pixel data signals should be filtered.

44. (Previously Presented) The method as set forth in claim 10 wherein the applying further comprises applying a different filter to each of the transformed sets of pixel data signals.

45. (Previously Presented) The system as set forth in claim 29 wherein the filter system further comprises at least three different filters, each of the filters filtering a different one of the transformed sets of pixel data signals.

46. (Previously Presented) The system as set forth in claim 25 further comprising a transformation system that applies a color-space transformation to the sets of pixel data signals before the filters filter the sets of pixel data.

47. (New) The system as set forth in claim 25 further comprising a grayscale masking system with a grayscale mask for each of the sets of pixel data signals, each of the grayscale masks has one of a range of threshold values for an exposure condition for each of the pixel data signals that indicates when each of the pixel data signals should be filtered, wherein the filtering system applies the different filters to one or more of the pixel data signals in each of the sets of pixel data signals based on the threshold values for each of the pixel data signals provided by the grayscale mask.

48. (New) The system as set forth in claim 29 further comprising a grayscale masking system with a grayscale mask for each of the sets of pixel data signals, each of the grayscale masks has one of a range of threshold values for an exposure condition for each of the pixel data signals that indicates when each of the pixel data signals should be filtered, wherein the filtering system applies the filters to one or more of the pixel data signals

in each of the sets of pixel data signals based on the threshold values for each of the pixel data signals provided by the grayscale mask.